

- William Bladen Croft, M.A., Physics Master of Winchester College, 9 College Street, Winchester (proposed by Professor C. Pritchard) ;
- James Gallaher, The Limes, Leyton, and St. George's House, Eastcheap, E.C. (proposed by James Glaisher) ;
- Rev. H. Grattan Guinness, D.D., F.R.Hist.Soc., F.R.G.S., Harley House, Bow, and Cliff House, Curbar, Derbyshire (proposed by E. Walter Maunder) ;
- C. W. H. Jeavons, Analyst, Horseley Place, Tipton, Staffordshire (proposed by A. Taylor) ;
- John Mitchell, Brockholes, Huddersfield (proposed by Joseph Gledhill) ;
- William M. Pierson, San Francisco, California, U.S.A. (proposed by Edward E. Barnard) ;
- James Lidderdale Scott, Shanghai, China (proposed by L. S. Little) ;
- Arthur Laidlaw Selby, M.A., Assistant Professor of Physics in the University College of South Wales and Monmouthshire, Cardiff (proposed by Professor R. B. Clifton) ;
- Rev. Walter Sidgreaves, S.J., Director of the Observatory, and Professor of Physics, Stonyhurst College, Blackburn, Lancashire (proposed by W. H. M. Christie) ;
- John Peter George Smith, Sweeney Cliff, Coalport, Shropshire (proposed by Sir William Thomson) ;
- Arthur J. Walker, New College, Oxford (proposed by Professor C. Pritchard).

155 presents were announced as having been received since the last meeting, including, among others :—

- Birmingham (J.), *The Red Stars*, new edition by Rev. T. E. Espin, presented by Rev. T. E. Espin.
- Catalog der Astronomischen Gesellschaft, Zone + 55° bis + 65°, Zone + 1° bis + 5°, presented by the Society.
- Cayley (A.), *Collected Mathematical Papers*, vol. 3, presented by the Author.
- Clerke (A. M.), *The System of the Stars*, presented by the Author.
- Engelhardt (B. d'), *Observations Astronomiques faites . . . dans son Observatoire à Dresde*, II^{me}. partie, presented by the Author.
- Opere de Galileo Galilei, Edizione Nazionale, vol. 1, presented by the Italian Government.
- Schubert (E.), *Tables of Melpomene and Eunomia*, presented by the American Nautical Almanac Office.
- Tisserand (F.), *Traité de Mécanique Céleste*, tome 2, presented by the Author.
- Winterhalter (A. G.), *The International Astrophotographic Congress, and visit to European Observatories, &c.*, presented by the U.S. Naval Observatory.

Ahmed Mukhtar Pasha, The Reform of the Calendar, translated by Sir J. W. Redhouse, K.C.M.G., presented by Sir J. W. Redhouse.

Photographs of the Moon taken with the Great Equatoreal of the Lick Observatory (3 original negatives and one glass positive). Photograph of the Total Solar Eclipse, 1889, Dec. 22, by J. M. Schaeberle (2 glass positives). Photograph of *Jupiter*, taken with the Great Equatoreal of the Lick Observatory, by E. S. Holden (glass positive — enlargement). Comparative photographs of the high Sun and low Sun spectra, presented by Mr. F. McClean.

Presented
by the Lick
Observatory.

On the Real and Apparent Variations of the Latitude of Greenwich.
By Professor F. Folie.

(Communicated by the Astronomer Royal.)

The real variations of latitude are, we know, given by the formula

$$r \cos (int + \beta).$$

The values of r given by Peters and Downing* are

$$0''.079 \text{ and } 0''.075.$$

The same value, determined by me from the diurnal variations in R.A., deduced from the observations of W. Struve at Dorpat in 1823–25, is :

1823	...	...	0''.080
1824	...	...	0''.075
1825	...	...	0''.086

The value of the constant β , determined by Peters, Nyrén, and Downing,† are, the last being brought back to Dorpat :

1842	...	...	341°.6
1850	...	...	224
1872	...	...	175

Astronomers have not yet been able to bring these values into accordance by assuming the adopted increase of 430° (about) yearly, corresponding to a period of 305 days.

Theoretical reasons, agreeing with my ideas as to the constitution of the central nucleus of the Earth, have made me doubt the

* I cannot use those of Nyrén, because they are too discordant.

† Peters (*A. N.*, xxii., 1845, 128). Nyrén (*St. Pétersbourg M.* 1873, no. 10, pp. 37, 38). Downing (*M. N.*, xl., 1880, pp. 431, 432).